(4) Beginning and end of year inventories for calcined lime byproducts or wastes sold, by type.

(5) Annual amount of calcined lime byproduct or waste sold, by type (tons).

(6) Annual amount of lime product sold, by type (tons).

(7) Annual amount of calcined lime byproduct or waste that is not sold, by type (tons).

(8) Annual amount of lime product not sold, by type (tons).

(b) If a CEMS is not used to measure CO_2 emissions, then you must report the information listed in paragraphs (b)(1) through (17) of this section.

(1) Annual CO_2 process emissions from all lime kilns combined (metric tons).

(2) Monthly emission factors (metric ton CO_2/ton lime product) for each lime product type produced.

(3) Monthly emission factors for each calcined byproduct or waste by lime type that is sold.

(4) Standard method used (ASTM or NLA testing method) to determine chemical compositions of each lime type produced and each calcined lime byproduct or waste type.

(5) Monthly results of chemical composition analysis of each type of lime product produced and calcined byproduct or waste sold.

(6) Annual results of chemical composition analysis of each type of lime byproduct or waste that is not sold.

(7) Method used to determine the quantity of lime produced and/or lime sold.

(8) Monthly amount of lime product sold, by type (tons).

(9) Method used to determine the quantity of calcined lime byproduct or waste sold.

(10) Monthly amount of calcined lime byproduct or waste sold, by type (tons).

(11) Annual amount of calcined lime byproduct or waste that is not sold, by type (tons).

(12) Monthly weight or mass of each lime type produced (tons).

(13) Beginning and end of year inventories for each lime product that is produced.

(14) Beginning and end of year inventories for calcined lime byproducts or wastes sold.

(15) Annual lime production capacity (tons) per facility.

(16) Number of times in the reporting year that missing data procedures were followed to measure lime production (months) or the chemical composition of lime products sold (months).

(17) Indicate whether CO_2 was used on-site (i.e. for use in a purification process). If CO_2 was used on-site, provide the information in paragraphs (b)(17)(i) and (ii) of this section.

(i) The annual amount of CO_2 captured for use in the on-site process.

(ii) The method used to determine the amount of CO_2 captured.

[75 FR 66465, Oct. 28, 2010, as amended at 78 FR 71959, Nov. 29, 2013]

§ 98.197 Records that must be retained.

In addition to the records required by § 98.3(g), you must retain the records specified in paragraphs (a) and (b) of this section.

(a) Annual operating hours in calendar year.

(b) Records of all analyses (e.g. chemical composition of lime products, by type) and calculations conducted.

§ 98.198 Definitions.

All terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

TABLE S–1 TO SUBPART S OF PART 98—BASIC PARAMETERS FOR THE CALCULATION OF EMISSION FACTORS FOR LIME PRODUCTION

Variable	Stoichiometric ratio
SR_{CaO}	0.7848
SR_{MgO}	1.0918

Subpart T—Magnesium Production

SOURCE: 75 FR 39761, July 12, 2010, unless otherwise noted.

§ 98.200 Definition of source category.

The magnesium production and processing source category consists of the following processes:

(a) Any process in which magnesium metal is produced through smelting (including electrolytic smelting), refining, or remelting operations.

(b) Any process in which molten magnesium is used in alloying, casting, drawing, extruding, forming, or rolling operations.

§ 98.201 Reporting threshold.

You must report GHG emissions under this subpart if your facility contains a magnesium production process and the facility meets the requirements of either § 98.2(a)(1) or (2).

§ 98.202 GHGs to report.

(a) You must report emissions of the following gases in metric tons per year resulting from their use as cover gases or carrier gases in magnesium production or processing:

(1) Sulfur hexafluoride (SF_6).

(2) HFC–134a.

(3) The fluorinated ketone, FK 5–1–12.

(4) Carbon dioxide (CO_2).

(5) Any other GHGs (as defined in § 98.6).

(b) You must report under subpart C of this part (General Stationary Fuel Combustion Sources) the CO_2, N_2O, and CH_4 emissions from each combustion unit by following the requirements of subpart C.

§ 98.203 Calculating GHG emissions.

(a) Calculate the mass of each GHG emitted from magnesium production or processing over the calendar year using either Equation T–1 or Equation T–2 of this section, as appropriate. Both of these equations equate emissions of cover gases or carrier gases to consumption of cover gases or carrier gases.

(1) To estimate emissions of cover gases or carrier gases by monitoring changes in container masses and inventories, emissions of each cover gas or carrier gas shall be estimated using Equation T–1 of this section:

$$E_x = \left(I_{B,x} - I_{E,x} + A_x - D_x\right) * 0.001 \qquad \text{(Eq. T-1)}$$

Where:

E_X = Emissions of each cover gas or carrier gas, X, in metric tons over the reporting year.

$I_{B,x}$ = Inventory of each cover gas or carrier gas stored in cylinders or other containers at the beginning of the year, including heels, in kg.

$I_{E,x}$ = Inventory of each cover gas or carrier gas stored in cylinders or other containers at the end of the year, including heels, in kg.

A_X = Acquisitions of each cover gas or carrier gas during the year through purchases or other transactions, including heels in cylinders or other containers returned to the magnesium production or processing facility, in kg.

D_X = Disbursements of each cover gas or carrier gas to sources and locations outside the facility through sales or other transactions during the year, including heels in cylinders or other containers returned by the magnesium production or processing facility to the gas supplier, in kg.

0.001 = Conversion factor from kg to metric tons

X = Each cover gas or carrier gas that is a GHG.

(2) To estimate emissions of cover gases or carrier gases by monitoring changes in the masses of individual containers as their contents are used, emissions of each cover gas or carrier gas shall be estimated using Equation T–2 of this section:

$$E_{GHG} = \sum_{p=1}^{n} Q_p * 0.001 \qquad \text{(Eq. T-2)}$$

Where:

E_{GHG} = Emissions of each cover gas or carrier gas, X, over the reporting year (metric tons).

Q_p = The mass of the cover or carrier gas consumed (kg) over the container-use period p, from Equation T–3 of this section.

n = The number of container-use periods in the year.

0.001 = Conversion factor from kg to metric tons.

X = Each cover gas or carrier gas that is a GHG.

(b) For purposes of Equation T–2 of this section, the mass of the cover gas used over the period p for an individual container shall be estimated by using Equation T–3 of this section: